

## ABSTRACT

A low power voltage-to-current converter is provided for use in a phase lock loop circuit. The low power voltage-to-current converter includes an input stage, and output stage, and a non-differential output terminal. The input stage includes a pair of differential signal input terminals to receive a differential input signal pair, a first and second switching transistor pair coupled to the differential input signal pair, and a first and second complementary transistor pair coupled to the first and second switching transistor pair. The output stage is coupled to the first complementary transistor. The non-differential output terminal is coupled to the output stage, and is operable to transmit an output current signal, wherein the output current signal is a function of the differential input signals. The voltage-to-current converter is also designed for use in a phase lock loop.